1-3 (Previously Cancelled)

4. (Currently Amended) A method of programming cyclical machines having an industrial controller, comprising the steps of:

providing the industrial controller with a runtime system, said controller having prioritized running levels and tasks, with at least one sequential running level being created;

formulating a machine sequence in a sequential program; said sequential program including specific mechanisms that enable a waiting for condition to be satisfied to be carried out with high priority and after the waiting for condition has been satisfied, to carry out the subsequent program sequence with high priority up to a defined user-programmed end, the running levels being assigned system and/or user programs; and utilizing said sequential program in said controller.

- 5. (Currently Amended) The method of programming according to claim 4 and 7, wherein the running levels are created from the group consisting of system levels and/or, user levels, and system levels and user levels.
- 6. (Currently Amended) The method of programming according to claim 4, wherein the running level model is clocked and wherein the basic clock may be is derived from any of an internal timer, an internal clock of a communication medium, an external device or a variable which belongs to the technological process.

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7. (Newly Added) The method of programming according to claim 1, wherein the running levels are selected from the group consisting of an assigned system, user program, and an assigned system and user program.